for pleurisy, showed that the heart presented no anomaly before the accident. Mendelsohn thinks that in addition to the traumatism there was a strain on the heart from the struggle, and that this, with the anxiety of the man's critical position, was important in the production of the lesion.

Tuberculous Endocarditis.—BENDA (*Deutsche med. Wochenschrift*, 1898, No. 7) records a remarkable example of this. A boy, aged ten years, died of acute miliary tuberculosis following hip disease. The numerous recent tubercles in all organs pointed to a blood-infection, but examination of the veins showed no point of entrance. There was a warty endocarditis, and on the mitral valve, besides the fine translucent granulations, there was a rough yellow nodule the size of a hempseed. This was composed of a vascularized granulation-tissue with epithelial cells, but with no giant cells. The free surface showed irregular necrotic areas, partly caseous and partly hyaline, with enormous numbers of tubercle bacilli. A zone half a millimetre in thickness consisted wholly of colonies. That this was the source of the general infection cannot be doubted.

Dental Caries and Soil.—The intimate relation of dental caries with other important diseases makes interesting a reference to certain observations of C. ROSE, which have recently been confirmed in Sweden. A year ago Rose claimed, as the result of the examination of the teeth of 20,000 Bavarian recruits, that the harder the water and richer the soil in lime and magnesia, the better the teeth. Forberg reported the Swedish results at a recent congress of dentists. Examinations of the teeth were made by various dentists in different parts of Sweden. In that country the racial and economic conditions are tolerably uniform, but the hardness of the water varies greatly. A constant increase of the proportion of carious teeth was found to coincide with the diminishing hardness of the water, so that with a hardness of 12° there were 15.4 per cent.; with a hardness of 0.5°, 25 per cent. of carious teeth.—*Münchener med. Wochenschrift*, 1898, No. 3.

Typhoid Fever without Intestinal Lesions.—NICHOLS and KEENAN (*Montreal Medical Journal*, January, 1898, p. 9) report the following case of typhoid fever without intestinal lesions: The patient came to the out-door department, stating that for about two months he had been suffering from headache, loss of appetite, and general weakness. Had been forced to give up work several times.

On admission his temperature was 103.6°, pulse 104, and respiration 36. Tongue was coated and dry; abdomen distended, tense, and tender. Fading rose-spots were visible, and the spleen was palpable. Bowels constipated. There was some impairment of the percussion note in left axillary region. The blood gave the typical serum reaction. The patient gradually failed, and death occurred thirteen days after admission. Blood-cultures taken before death were negative.

The chief points in the autopsy report are as follows: Spleen was dark-red and pulpy. Cultures from the spleen gave a bacillus which fulfilled all the requirements of Eberth's bacillus. The intestines were entirely free from ulceration, although the lowest three Peyer's patches in the ileum were slightly raised, but showed no signs of ulceration. There was no evidence of healed typhoid ulcers. Mesenteric glands were generally enlarged, congested, and succulent, especially about the ileo-cæcal region. Left lung showed broncho-pneumonia. Cultures from the liver were positive for Eberth's bacillus. Blood cultures taken at the autopsy were negative.

A search of the literature for the past ten years showed only nine cases of typhoid fever without intestinal lesions, which had been confirmed by the discovery of Eberth's bacillus. A number of other cases are reported, which, however, are not included, owing to the lack of corroboration by bacteriological investigation.

Typhoid without intestinal lesions falls clinically into three main classes:

1. Typical typhoid, minus the ulcerations.
2. Spleno-typhoid.
3. The nervous type, with extreme intoxication.

The cases of the first type are rare. Diarrhœa may be present. Three of the nine cases belong to this group.

The second type was first described by Eiselt. It is characterized by an excessively large spleen, often with acute perisplenitis and fever of a recurrent type. The writers state that some of these cases do present ulceration of the intestines, but it is often absent. Two of the nine cases belong to this class.

The third class, due to severe intoxication, are characterized by extreme prostration, delirium, coma, sometimes hyperpyrexia, degenerative changes in the vascular system leading to purpura, hæmaturia, melena. Jaundice is sometimes present. Many of these cases are, no doubt, examples of secondary septic infection. This class includes the rest of the nine cases, including the one the writers report.

Nichols and Keenan discuss at considerable length the possible explanations for the absence of intestinal lesions in typhoid. Three hypotheses must be considered. First, one must think of the possibility of infection through some avenue other than the intestine, as, for example, the respiratory tract. In such cases the brunt of the disease might fall on the lungs, and the intestine escape. Secondly, certain ptomaïnes derived from the gastro-intestinal tract, either circulating in the blood or present in the intestinal mucosa, act so as to neutralize the local action of the typhoid virus and bring about intestinal immunity. Finally, it may be assumed that toxins derived from germs other than typhoid may antagonize their virus, and a local immunity be thus acquired.

On the Coincident Occurrence of Epilepsy and Diabetes Mellitus.—EBSTEIN (*Deutsche medicinische Wochenschrift*, 1898, No. 1, S. 3, u. No. 2, S. 22) published a communication bearing on this subject in the *Semaine Médicale*, May 6, 1896, based on a case which came under his personal observation. Since then four other cases have been observed, the notes of which are here recorded. Three possibilities present themselves in considering the association between epilepsy and diabetes mellitus. First, the epileptiform attacks may be caused by some toxic substance occurring in diabetes; second, the diabetes mellitus or glycosuria may be a result of the